



On-board Weighscales for Heavy Vehicles



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On-board weigh scales

- What are they ?
- When and why are they useful ?
- What are the options ?
- What to be aware of ?



What are they ?

- Measurement devices that can provide drivers with current axle group weights for both trucks and trailers
- Actually measure the change in weight (due to payload)
- Add the measured payload increase to the known tare weight
- Can display individual axle group weights or add them together for a total GCM



When don't I need them?

- When your load is always well below legal axle group limits
- When your load “cubes out”
- When you are always able to accurately calculate your load beforehand
- When you always load on a weighbridge or via a metering system



When are they useful ?

- When you carry bulk products, but
 - are unable to load on a weighbridge or
 - via a metering system
- When you have no accurate way of knowing how much is being loaded onto your vehicle
- When your load may shift during transit



What are the advantages ?

- Allow drivers to accurately load very close to legal axle group limits
- Provide an ability & confidence to not overload (no excuses !!)
- Alerts the driver if the load has shifted (single compartment bulk powder tankers)
- Avoid overloading fines
- Increase payloads and profit margins
- Facilitate meeting compliance and CoR responsibilities



What are the main types of gauge ?

1. Those that utilise changes in airbag pressure

- Simple pressure gauge
- Calibrated pressure gauge that reads in tonnes
- Transducers that convert a pressure signal to an electrical signal to a mass measurement

2. Those that utilise load cells



What are the main types of display ?

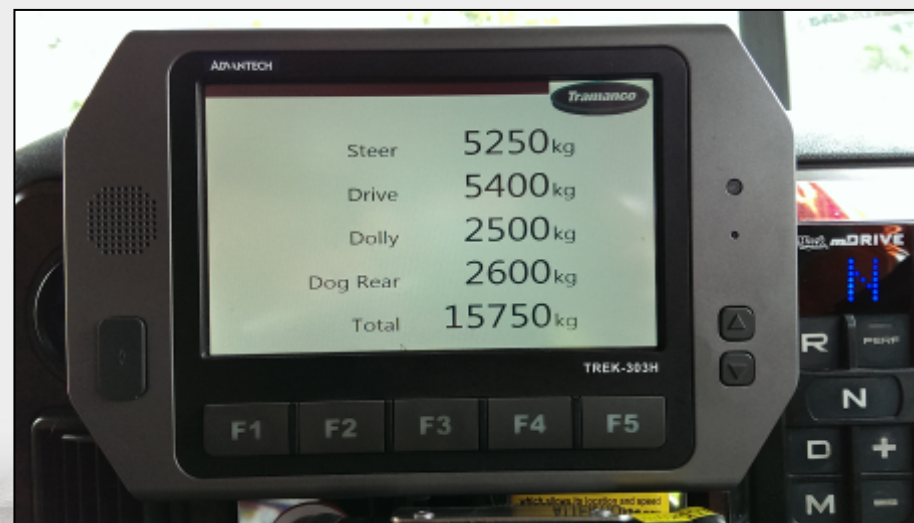
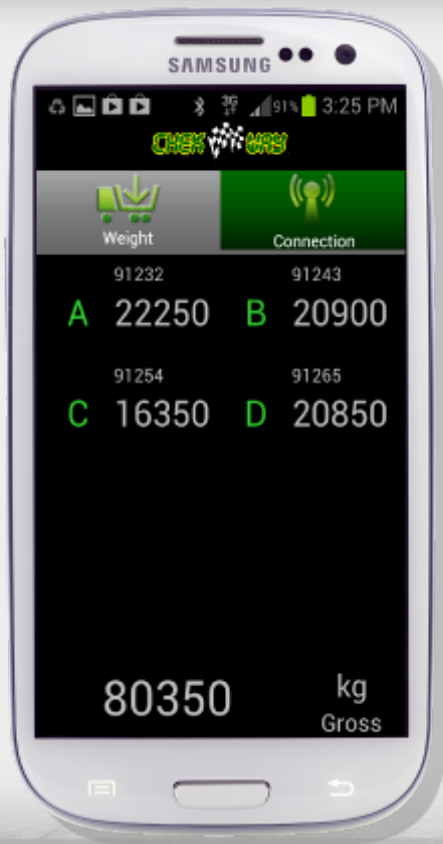
1. A pressure gauge dial mounted on the outside of the vehicle or in the cabin
2. A electronic digital display mounted on the outside of the vehicle or in the cabin
 - Displays may show just 1 axle group at a time, or all axle groups plus the total simultaneously
3. An electronic hand-held remote device
4. Smart phone app ??



Scale display options



Scale display options



On-board weigh scales can;

1. Provide your driver with the confidence to load all axles to the limit
2. Increase payloads and profit margins
3. Avoid overloading (and fines up to \$75,000)
4. Warn drivers of load shifts
5. Help to meet compliance, CML / HML / IAP / CoR responsibilities

One day, on-board scales will be become the norm rather than the exception





Thankyou

